## INTERNATIONAL SEARCH REPORT

Inte nal Application No PCT/IL2004/000921

A CLASS	FIGATION OF OUR IECT MATTER		
IPC 7	FICATION OF SUBJECT MATTER C07K16/40 A61K39/395 A61P37/	00	,
According to	o International Patent Classification (IPC) or to both national classific	estion and IDC	
	SEARCHED	ator and in C	
	commentation searched (classification system followed by classification CO7K A61K C12N	ion symbols)	
Documenta	tion searched other than minimum documentation to the extent that s	such documents are included in the fields sea	arched
Electronic d	ata base consulted during the international search (name of data ba	se and, where practical, search terms used)	
EPO-In	ternal, Sequence Search		
C. DOCUMI	ENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the rel	evant passages	Relevant to claim No.
X	US 5 854 003 A (ROTHE MIKE ET A 29 December 1998 (1998-12-29)  column 4, line 5 - line 19; tabl column 2, line 58 - line 67		1,3, 7-13, 17-20, 30, 36-40, 45-48, 53-57, 62-65, 70,75-85
X Furth	ner documents are listed in the continuation of box C.	X Patent family members are listed in	annex.
° Special ca	tegories of cited documents :		4 4 60
"A" docume	int defining the general state of the art which is not	"T" later document published after the Inter or priority date and not in conflict with to cited to understand the principle or the	he application but
	ered to be of particular relevance locument but published on or after the International	invention "X" document of particular relevance; the cla	
filing d		cannot be considered novel or cannot involve an inventive step when the doc	be considered to
which i	is cited to establish the publication date of another n or other special reason (as specified)	"Y" document of particular relevance; the cla cannot be considered to involve an inv	aimed invention
"O" docume	ent referring to an oral disclosure, use, exhibition or neans	document is combined with one or mor ments, such combination being obviou	e other such docu-
"P" docume	ont published prior to the international filing date but an the priority date claimed	in the art. "&" document member of the same patent fa	
Date of the	actual completion of the international search	Date of mailing of the international search	ch report
2	7 April 2005	3 0. 06. 2005	
Name and n	nailing address of the ISA	Authorized officer	
	European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel (221 70) 249 2040 Tr. 24 551 opp pl		
	Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	van Klompenburg, !	W

## **INTERNATIONAL SEARCH REPORT**

Inte. al Application No
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C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Х	WO 97/37016 A (BOLDIN MARK; METT IGOR (IL); WALLACH DAVID (IL); MALININ NIKOLAI (IL)) 9 October 1997 (1997-10-09) cited in the application	1,3, 7-13, 17-20, 30, 36-40, 45-48, 53-57, 62-65, 70,75-85		
	claims 22,26; figure 6; examples 1-6			
X	WO 95/26365 A (UNITED BIOMEDICAL, INC; WANG, CHANG, YI) 5 October 1995 (1995-10-05)	1,2,5,7, 8,30,31, 33, 35-37, 60,65, 66,68,84		
	SEQ ID NO: 38, claims 1-44 abstract			
X	US 5 030 565 A (NIMAN ET AL) 9 July 1991 (1991-07-09)	1,2,4,7, 8,30-32, 35-37, 59, 65-67,84		
	claim 2	05 07 30 4		
X	WO 90/10231 A (REPLICO MEDICAL AB) 7 September 1990 (1990-09-07) claim 2	1,2,6,8, 30,31, 34-37, 61,65, 66,69,84		
A	US 2003/082519 A1 (SCHUBART DANIEL ET AL) 1 May 2003 (2003-05-01) paragraphs [0018], [0044], [0047], [0126]; claims 4,8	1-58, 62-85		
Α	CHEN DANYING ET AL: "NIK is a component of the EGF/heregulin receptor signaling complexes."  ONCOGENE. 10 JUL 2003, vol. 22, no. 28, 10 July 2003 (2003-07-10), pages 4348-4355, XP002315069 ISSN: 0950-9232 figure 4	1-58, 62-85		

## INTERNATIONAL SEARCH REPORT

Inte I Application No PCT/IL2004/000921

		701/12200	94/000921
Category °	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	<del></del>	Relevant to claim No.
Category	Citation of document, with indication, where appropriate, of the relevant passages		Helevant to Claim No.
L,P, X	WO 03/087380 A (RAMAKRISHNAN PARAMESWARAN; SHMUSHKOVICH TAISIA (IL); WALLACH DAVID (I) 23 October 2003 (2003-10-23)		1,3, 7-13, 17-20, 30, 36-40, 45-48, 53-57, 62-65, 70,75-85
	claims 26,32,49; figures 2,3; examples 7,9		70,75-85
		,	

International application No. PCT/IL2004/00⊙921

## INTERNATIONAL SEARCH REPORT

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. X Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 70-81 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
Claims Nos.:  because they relate to parts of the International Application that do not comply with the prescribed requirements to suc h an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4 (a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
$\cdot$
1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. X As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4-6,14-16,21-29,32-34,42-44,50-52,59-61,67-69 72-74 (completely) and claims 1-3, 7-13,17-20,30,31,35-41,45-49,53-58 62-66,70,71,75-85 (partially)
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest.
X No protest accompanied the payment of additional search fees.

#### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1 Claims :1,3,7-13,17-20,30,36-40,45-48,53-57,62-65,70,75-85 (all partially)

A preparation comprising one or more antibodies being capable of binding to SEQ ID NO:1. A method of preparing a monoclonal antibody. An antibody, a monoclonal antibody, a pharmaceutical composition. A method of regulating a biochemical activity of a NIK molecule. A composition of matter comprising a substrate covalently attached to a polypeptide of SEQ ID NO:1. The use of a preparation comprising an antibody recognizing SEQ ID NO:1 in the manufacture of a medicament. A method of treatment. A method for purification of a NIK binding protein. The use of an antibody for an ELISA assay and the usr of an antibody for immune purification of NIK.

Invention 2-6: Claims 1,3,7-13,17-20,30,36-40,45-48,53-57,62-65,70,75-85 (all partially)

As invention 1, but whereby invention 2 is characterized by SEQ ID NO:2, invention 3 by SEQ ID NO:3 etc.

Invention 7 Claims: 4,14-16,21,24,27,32,42,50,59,67,72 completely, 1-3,7-13,17-20,30,31,35-41,45-49,53-58,62-66,70,71, 75-85(partially)

As invention1, but characterized by SEQ ID NO:7 and additionaly hybidoma clone No-I-3092 and monoclonal antibodies generated by it.

Invention 8 Claims:
1-3,7-13,17-20,30,31,35-41,45-49,53-58,62-66,70,71,75-85(partially)

As invention 1, but characterized by SEQ ID: NO 8

Invention 9: claims
1,3,7-13,17-20,30,36-40,45-48,53-57,62-65,70,75-85 (all partially)

As invention 1, but characterized by SEQ ID NO:9

Invention 10 Claims: 1,3,7-13,17-20,30,36-40,45-48,53-57,62-65,70,75-85 (all partially)

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

As invention 1, but characterized by SEQ ID NO:10

Invention 11 Claims: 5,22,25,28,33,43,51,60,68,73 (completely), 1-3,7-13,17-20,30,31,35-41,45-49,53-58,62-66,70,71,75-85 (partially)

As invention1, but characterized by SEQ ID NO:11 and additionaly hybridoma clone No-I-3093 and monoclonal antibodies generated by it.

Invention 12, Claims: 6,23,26,29,34,44,52,61,69,74 (completely), 1-3,7-13,17-20,30,31,35-41,45-49,53-58,62-66,70,71, 75-85(partially)

As invention 1, but characterized by SEQ ID NO:12 and additionaly hybridoma clone No-I-3095 and monoclonal antibodies generated by it.

Invention 13 Claims: 1-3,7-13,17-20,30,31,35-41,45-49,53-58,62-66,70,71,75-85(partially)

As invention 1, but characterized by SEQ ID NO: 13

Invention 14 Claims: 1-3,7-13,17-20,30,31,35-41,45-49,53-58,62-66,70,71,75-85(partially)

As invention 1, but characterized by SEQ ID NO: 15

Inventions 15-18: Claims 1,3,7-13,17-20,30,36-40,45-48,53-57,62-65,70,75-85 (all partially)

As invention 1, but whereby invention 15 is characterized by SEQ ID NO: 18, invention 16 is characterized by SEQ ID NO: 19, invention 17 by SEQ ID NO: 20 and invention 18 by SEQ ID NO: 22.

# INTERNATIONAL SEARCH REPORT Information on patent family members

Inter.... al Application No PCT/IL2004/000921

			PCI/ILZOC	94/000921
Patent document cited in search report	Publication date	Patent famil member(s)	/	Publication date
US 5854003 A	29-12-1998	AU 83820 CA 22959 EP 10121 JP 20015103 US 58440	78 B2 98 A 99 A1 74 A1 48 T	01-12-1998 14-09-2000 25-01-1999 14-01-1999 28-06-2000 31-07-2001 01-12-1998 14-01-1999
WO 9737016 A	09-10-1997	AU 21755 BG 1028 BR 97085 CA 22500 CN 12214 CZ 98031 EA 430 EE 98003 EP 08941 HU 99024 WO 97370 JP 20005078 NO 9845 NZ 33190 PL 3292	17 A 18 A 35 A1 49 A 39 B1 22 A 30 A1 29 A2 16 T 51 A	03-05-2001 22-10-1997 31-05-1999 03-08-1999 09-10-1997 30-06-1999 12-05-1999 26-02-2004 15-04-1999 03-02-1999 28-10-1999 09-10-1997 27-06-2000 24-11-1998 28-02-2000 15-03-1999 07-05-1999
WO 9526365 A	05-10-1995	AU 21953 CA 21865 CN 11467 EP 08110 JP 95109 WO 95263	95 A1 72 A 16 A1 75 T	17-10-1995 05-10-1995 02-04-1997 10-12-1997 04-11-1997 05-10-1995
US 5030565 A	09-07-1991	US 556326 US 559156 US 57861 US 573377 US 655176 US 597266 AT 11396 AU 338606 AU 338607 AU 339506 CA 121923 DE 348631 DE 348631 DE 348631 EP 015242 EP 059206 IT 117796 JP 259256 JP 728439 JP 728439 JP 6150006 US 501555 WO 850086 ZA 840643	7 A A B B B B B B B B B B B B B B B B B	08-10-1996 07-01-1997 28-07-1998 31-03-1998 22-04-2003 26-10-1999 15-11-1994 28-01-1993 24-08-1989 02-02-1989 12-03-1985 17-03-1987 15-12-1994 01-06-1995 28-08-1985 13-04-1994 03-09-1987 19-03-1997 31-10-1995 16-01-1986 14-05-1991 28-02-1985 27-03-1985

## INTERNATIONAL SEARCH REPORT Information on patent family members

International Application No PCT/IL2004/000921

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 9010231	A	07-09-1990	AU AU CA DE DE EP JP WO US	640921 B2 5283490 A 2048655 A1 69024951 D1 69024951 T2 0461193 A1 4507286 T 3271666 B2 9010231 A1 6242174 B1	09-09-1993 26-09-1990 03-09-1990 29-02-1996 01-08-1996 18-12-1991 17-12-1992 02-04-2002 07-09-1990 05-06-2001
US 2003082519	A1	01-05-2003	EP	1201765 A2	02-05-2002
WO 03087380	A	23-10-2003	AU CA CA EP EP WO WO	2003222415 A1 2003226607 A1 2482387 A1 2482718 A1 1499724 A1 1499729 A1 03087374 A1 03087380 A1	27-10-2003 27-10-2003 23-10-2003 23-10-2003 26-01-2005 26-01-2005 23-10-2003 23-10-2003